

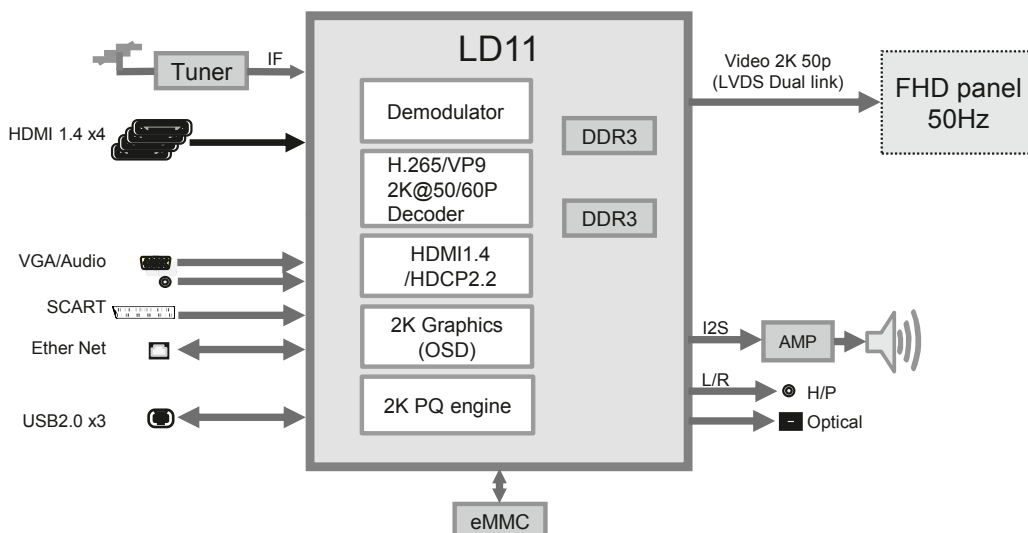
SoC for High Performance Smart TV System LD11E (SC1405AP1-30A)



■ Features

- ✓ Suitable for high performance 2K/50p smart-TV solution
- ✓ Realized quickly responsive UI with high performance CPU (ARM® Cortex®-A53) and GPU

■ Application (2K-TV 50p)



■ Specifications

■ SoC

- Package: FBGA (23x23mm)
Balls: 487pins, 0.8mm pitch
- Power: 1.2/ 1.5/ 1.8/3.3V

■ CPU

- ARM® Cortex®-A53 x2
- Instruction / Data caches: 32 / 32-KB

■ DDR memory

- DDR3-1600 (ch0:16bit, ch1:16bit)

■ General purpose peripherals

- Timers x16 (16-bit x12, 8-bit x4)
- UART x4 (*maximum)
- SPI x2 (*maximum)
- I²C x2
- NAND flash x1 (SLC)
- eMMC x1 (Version5.0)

■ Media I/F

- USB: 2.0 x3-ports
- Ethernet: x1-port (10/ 100Mbps)

■ Stream I/F

- Serial TS: In x3, In/ Out x2
- Parallel TS: In x2, Out x1

■ Video I/O

- Analog input: SCART x1, RGB/ YPbPr x3
- HDMI x4-ports (ver.1.4) *HDCP2.2
- MHL x1-port (ver.2.1) (shared pins with HDMI)
- LVDS (Dual link for 2K 50Hz)

■ Audio I/O

- Analog input: LR x3
- Analog output: LR x2
- Digital input: I²S x1, SPDIF x1
- Digital output: I²S x1, SPDIF x1

■ Graphics processor

- Original GPU (1Gpixel/s)
- OpenGL ES1.1/ 2.0 compliant

■ Standby microcontroller

- 32-bit microcontroller

■ Integrated DTV Demodulator:

- DVB-T2/S2/T/C (Supports CI/CI+)

■ Integrated high performance Multi-format Video Decoder supports (*1):

- MPEG-1
- MPEG-2 MP@HL
- MPEG-4 AVC (H.264 HP@L4.1)
- HEVC (H.265 MP@L4.1 8/10bit)
- VC-1
- DivX (HD, plusHD)
- VP8
- VP9(8/10bit)
- JPEG (include Motion-JPEG)

■ Integrated Audio Processor supports (*1):

- MPEG-1 Layer 2/3
- MPEG-2 Layer 2/3
- MPEG-2 AAC (SBR)
- Dolby Digital (Plus)
- Dolby True HD
- DTS
- DTS-HD
- WMA 8/9
- WMA pro
- Vorbis
- FLAC
- Apple Lossless

■ Integrated Video Processor:

- Super-resolution
- Picture quality Adjustment for 2K pictures

*1: To use some of these formats, you may have to acquire a license or perform a software development. In addition, some combinations of audio/video formats may have a limitation to use.

For details, please contact our service representative.

* "ARM" and "Cortex" are registered trademarks or trademarks of ARM Company, U.K.

* 'HDMI' is a trademark or registered trademark of HDMI Licensing, LLC.

The Products and product specifications described in this document are subject to change without notice for modification and/or improvement. At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements. All company names, brand names and trademarks herein are property of their respective owners.

Copyright 2017 Socionext Europe
Edited: Visual System BU

Socionext Europe GmbH

Pittlerstrasse 47
63225 Langen, Germany
Tel: +49-6103-3745-0
Fax: +49-6103-3745-122
<http://eu.socionext.com>